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MASTER OF MILITARY STUDIES

TITLE: COMMAND AND CONTROL BEGAN WITH SUBOTAI BAHADUR, THE THIRTEENTH CENTURY MONGOL GENERAL

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF MILITARY STUDIES

AUTHOR: LIEUTENANT COMMANDER SEAN SLAPPY

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Executive Summary

Title: Command and Control Began with Subotai Bahadur, the Thirteenth Century Mongol General

Author: Lieutenant Commander Sean Slappy, United States Navy

Thesis: Subotai was a successful operational commander, because he executed the Mongol art of war through a sophisticated command and control system that was superior to that of his Eastern European adversaries.

Discussion: The Mongol invasion of Hungary of 1240 and 1241 was planned and led by the Mongol nation's most experienced and capable general, Subotai. This thesis discusses Subotai's origins, and the institutions that produced Mongol military commanders. Subotai was a successful operational commander, because he was supported by talented subordinate commanders who could be trusted to operate independently and with freedom of action. Mongol officers led men who were expert horsemen and archers. These men were organized in accordance with a decimal-based system that provided Subotai with several command and control advantages. When discipline and training were applied to the organized Mongol army, the result was the most dominant military force of the period. Through deliberate planning (an important aspect of command and control) that was supported by intelligence and communications, Subotai developed a winning strategy for the conquest of Hungary.

Conclusion: Subotai had the following command and control advantages over the feudal European armies he encountered: an educated officer corps, of which Subotai was a product; professional and disciplined soldiers; a standing army with a sophisticated military organization and a clear command structure; and, an excellent planning process that was supported by intelligence.

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Preface

I would like to thank Dr. Robert Bruce for his mentoring and guidance.

Most of all, I would like to thank my wife, Leah, for her support. She edited my writing, allowed me to sit in front of the computer for hours, put up with stacks of books spread throughout the house, and kept me motivated.

"...an immense horde of that detestable race of Satan, the Tartars, burst forth from their mountain-bound regions, and making their way through rocks apparently impenetrable, rushed forth, like demons loosed from Tartarus (so that they are well called Tartars, as it were inhabitants of Tartarus [Hell]), and overrunning the country, covering the face of the earth like locusts, they ravaged the eastern countries...with lamentable destruction, spreading fire and slaughter wherever they went....The men are inhuman and of the nature of beasts, rather to be called monsters than men....They have no human laws..."

- Matthew Paris, from Chronicles¹

INTRODUCTION

Matthew Paris' description, written in 1240, provides insights into how many medieval Europeans viewed the Mongol invaders who appeared suddenly from the east to conquer their lands: a lawless army of sub-humans that relied on numerical superiority for victory. But, this view belies the truth. The Mongol Army that marched into Russia and Eastern Europe was outnumbered, and constantly operated hundreds of miles inside hostile enemy territory and at the end of its lines of communication. Instead of an overwhelming horde (a word that originates from the Mongol *ordu*, or camp) of monsters, the Mongols were a well-led army of disciplined, organized, and trained horse-archers.

The Mongol invasion of Hungary of 1240-1241 was planned and led by the Mongol nation's most experienced and capable general, Subotai. This thesis will examine aspects of the Hungarian Campaign to demonstrate that Subotai was a successful operational commander because he executed the Mongol art of war through a sophisticated command and control system that was superior to that of his adversaries. Specifically, this thesis will analyze Subotai's personal leadership development, his operational decisions, and the command and control advantages he had over the European armies he encountered. These command and control advantages were: an educated officer corps, of which Subotai was a product; a standing army of professional and disciplined soldiers; a sophisticated military organization with a clear command

structure; and, a planning process that was supported by excellent intelligence and communications.

THE MONGOL COMMANDER

Leadership is the most important element of command and control.² Command and control is the business of the commander, and Subotai was, perhaps, the greatest Mongol commander. Historian Timothy May said, "Whereas in the rest of the medieval world military genius, or even competence, was rare, among the Mongols it was expected from every commander."

The Great Soldier Among Them

Subotai was in his mid-sixties and embodied a lifetime of Mongol military experience and training when he planned and led the Hungarian Campaign. By the time of his death in 1248 at the age of seventy-three, Subotai "had conquered thirty-two nations and won sixty-five pitched battles." Friar Giovanni DiPlano Carpini, who was present at the coronation of Guyuk Khan in 1246, wrote that Subotai "is known as the great soldier among them."

He was born in about 1176 to a blacksmith of the Uriyangkhai, one of the clans known as the Forest Mongols, who lived in the forest taiga of Lake Baikal and Siberia north of Mongolia. Subotai joined Chinggis Khan's (then known as Temujin) band in about 1190 at the age of fourteen or fifteen. Earlier in 1187, Subotai's father had given Subotai's older brother, Jelme, to Temujin as a slave saying, "Now Jelme is yours, to put on your saddle, to open your door." The brothers rose quickly in Chinggis Khan's service to become two of his greatest generals, closest companions, and most trusted advisors.

At the outset of his campaign against Hungary in December 1240, Subotai divided his army of approximately 100,000 into five columns that followed different routes of advance in

pursuit of distinct strategic objectives (see Appendix A). Two moved against the Poles, one against the Czechs, and two advanced directly into Hungary. The columns were to reunite to achieve Subotai's ultimate objective of conquering Hungary. Subotai could not have divided his army and have expected each column to successfully and independently strike objectives separated by hundreds of miles, and then reunite to strike Hungary unless he had total trust and confidence in his subordinate commanders and completely understood the capabilities of the Mongol Army. Effective command and control, like that practiced by Subotai, requires that a senior trusts his subordinates to carry out assigned missions with minimal supervision, act in concert with an overall mission intent, report developments as necessary, and effect any necessary coordination. Subotai had trust in his subordinates, because like them, he was a product of the practices and institutions that developed a Mongol *noyan* (plural, *noyad*), or military commander.

Merit Based Promotion

The Mongols selected their senior military commanders on the basis of proven ability and results, not on birth or tribal loyalties – Subotai was not a Mongol by birth, but commanded cavalry by the age of twenty-five. ¹⁰ Chinggis Khan said, "He who is able to command ten men in battle formation will be able to command a thousand or ten thousand in battle formation, and he deserves such a command." Any officer who could not perform was relieved and replaced by a subordinate. Rashid observed: "If a troop commander is unable to keep his troop ready for battle, he, his wife and children will all be arraigned and another leader will be selected from within the troop. Commanders of squadrons, regiments and divisions will be dealt with in similar manner." Unrestricted promotion was very much a part of the Mongol army. ¹³

However, it was not simply a matter of picking the best soldier among them to lead.

Chinggis Khan said of a great warrior named Yesubei: "...no man...possesses his ability! But because he does not suffer from the hardships of a campaign, shrugs off hunger and thirst, he assumes that all others...are equally able to bear those hardships, whereas they cannot. For this reason he is not suitable to command an army."

The Mongols identified and developed the most promising officers among them for more senior leadership positions via two formal institutions – the *keshik* and the apprenticeship system.

Command and Staff College, Mongol Style

The *keshik* was first established in 1203 as a bodyguard force of eighty *kebte'ül* (night guards) and seventy *turqa'ut* (day guards), with an additional force that escorted Chinggis Khan into battle. Historian Richard Gabriel calls the *keshik* "a staff and command college for combat commanders and military strategists." According to Juvaini, "members combined the roles of royal bodyguard, hostage, household supervisor and trainee for future political and military careers." In 1206, Chinggis Khan increased the *keshik* to 10,000 men by recruiting "the ablest and best-looking men... the sons of captains... the sons of common soldiers, any man who is worthy to serve in my presence." The *keshik*, which continued to function after Chinggis Khan's death, became the home of the best officers, and each was trained in staff work and attended education and briefing sessions.

The *keshik* provided consistent and systematic training in Mongol tactics and strategy, enabling *noyad* to coordinate, rather than act as individual commanders directing personal armies, as was the case in European armies.²⁰ Subotai and his commanders would have analyzed past campaigns and battles to search for results and lessons that could inform future actions and, thereby, improve command and control.²¹ Furthermore, the *keshik* built strong ties between

officers and fostered loyalty, because it emphasized serving the Khan. Once dispersed throughout the army, these officers could only reinforce their soldiers' feelings of loyalty to the Khan.²²

Typically, only an officer from the *keshik* could command an army of conquest, but even the most junior officer of the *keshik* was considered fit to command any other unit in the Mongol army.²³ Chinggis Khan said, "The members of my guard are superior to the captains of thousands. The companions of my guard are superior to the captains of hundreds and the captains of tens," and, "Let no commander hold himself above the members of my guard."²⁴

Throughout his life, Subotai was known as "Subotai *Bahadur*." This title originated from his time as a *bahadur* (a knight or warrior) of the *keshik*. Subotai was likely enrolled in the *keshik* in 1203 when it was first established. As an Uriyangkhai, Subotai's early childhood was different to that of a steppe Mongol. He did not learn to ride or use a bow from an early age – it is possible that Subotai did not ride a horse until he joined the Mongol army. According to Gabriel, when Subotai first joined the Mongol army he may have been assigned as the Khan's "keeper of the tent door," like Jelme before him, while he learned the martial skills of a Mongol soldier, perhaps under the guidance of a Mongol officer. Although only a junior officer of the *keshik*, as Jelme's brother and the Khan's door keeper, Subotai would have been present at war councils and discussions that gave him early exposure to the planning and execution of war at the operational level. ²⁶

The Apprenticeship System

Like the modern concept of a "leader-as-teacher," the Mongol apprenticeship system paired junior officers and princes, with senior commanders in order to develop the subordinate's maturity, initiative, wise judgment, and sense of responsibility. During his early military career,

Subotai was often subordinate to either Chinggis Khan or a talented general named Jebe. Subotai did carry out independent operations during his early career, but prior to the Kwarazmian Campaign (1219-1220), he was usually paired with Jebe who was the senior commander of the two. ²⁷

Royal princes were paired with generals who, while typically lower in rank, had the final say throughout the course of a campaign. During the Hungarian Campaign, Chinggis Khan's grandson, Batu, was placed in nominal command, but it was Subotai who planned, directed battles, and maintained the real authority. In fact, there were no fewer than ten princes among the army that marched on Europe. 30

In Pursuit of One Goal

Subotai gave his commanders mission-type orders and allowed them to operate independently. Subotai trusted that his subordinates would remain focused on their assigned tasks, even though they were separated from him by hundreds of miles. Subotai's style of command and control, which emphasized decentralized control and granted subordinates significant freedom of action, required that *noyan* at all levels be rigorously trained and educated.³¹ Certainly, Subotai would have advised his commanders as Chinggis Khan had once personally advised him: "Though your army will divide beyond the great rivers all must continue in pursuit of one goal. Though mountain ranges separate your men from each other think of nothing else but this task...If you go to war with this in mind, that though I'm out of your sight it's as if you can see, that though I'm far away it's as if I'm near at hand." ³²

THE MONGOL WARRIOR AND HIS MILITARY ORGANIZATION

Subotai's command and control advantages began at the level of the individual soldier (see Appendix B). Marco Polo wrote: "Of all the troops in the world these are they which

endure the greatest hardship and fatigue, and which cost the least; and they are the best of all for making wide conquests of country."³³ When Mongol military organization, discipline, and training were applied to these individual warriors the result was the most dominant fighting force of the period. Organization, discipline, and training fostered unity-of-effort, enthusiasm, commitment, and loyalty among Mongol soldiers – qualities that were essential for Subotai to effectively command and control his army.

The Individual Mongol Warrior

Life on the Mongolian steppe was hard; warriors endured extremes of cold and wind, and dealt with limited water and scarce game.³⁴ Their nomadic life gave the Mongol soldier "incomparable powers of endurance," and "they could suffer without complaint and kill without pity and they were easily led."³⁵

All males between the ages of fifteen and sixty (except physicians, priests of any religion, and those who washed the bodies of the dead) were eligible for military service.³⁶ Chinggis Khan made archery and horsemanship instruction an obligation when he declared:

Just as *ortaqs* [merchants] come with gold spun fabrics and are confident of making profits on those goods and textiles, military commanders should teach their sons archery, horsemanship, and wrestling well. They should test them in these arts and make them audacious and brave to the same degree that *ortaqs* are confident of their own skill.³⁷

Juvaini further observed:

The [Mongol] men do not work except archery, though sometimes they take of the herds. Instead they hunt and work at shooting. All of them from the children to the adults are good archers, and their children, when they are two or three years old, begin to ride. They ride and gallop, and bows are given to the children according to their size and they are taught to shoot; they are very apt and daring besides.³⁸

The Mongol soldier routinely slept in the saddle and, with his three to four remounts, was capable of movement over great distances without rest.³⁹ Marco Polo observed Mongols go ten days without cooked food, subsisting only on blood drawn from the neck veins of their horses.⁴⁰

Also, the nomad's biannual requirement to shift camp, often over great distances, taught organized movement and discipline that carried over to a military campaign.⁴¹

At any level, the key individual in the command and control system is the commander who has the final responsibility for mission success. ⁴² Subotai executed operational decisions through a command and control system that exploited and enhanced the unique skills of his army. Subotai knew the capabilities and limits of the individual Mongol soldier. He knew his men were accustomed to privation, cold, and other hardships. Subotai's understanding enabled him to demand seemingly incredible actions from his army. For example, when Subotai's main column forced the Carpathian passes and marched on Hungary during winter, he covered fortymiles a day over difficult, snow-covered terrain – this speed of advance was incomprehensible to the Europeans.

Decimal Organization and Chain-of-Command

In 1206, Chinggis Khan built a national army based on decimal organization – a structure that would be familiar to modern soldiers. The Mongol command structure accomplished functions that modern military organizations are designed to: it established a clear chain-of-command; established reasonable spans of control; fostered unity-of-effort and cohesive teams; and, allowed for effective information distribution. Furthermore, decimal organization, combined with standardized training and equipment loads for each man, enabled commanders to task-organize units for specific missions.

The smallest unit was a ten man troop called an *arban* (plural, *arbat*). Ten *arbat* made up a 100 man squadron called a *jaghun* (plural, *jaghut*), and ten *jaghut* made up a regiment of 1,000 men called a *minqan* (plural, *minqat*). Ten *minqat* made up a 10,000 man division called a *tümen* (plural, *tümet*) that was capable of sustained, long-range operations on a strategic scale. 46

A Mongol field army usually comprised two to three *tümet* divided into three basic corps: the *baraghun ghar* (right flank), *je'ün ghar* (left flank), and the *töb* or *qol* (center or pivot). ⁴⁷
Each unit and corps possessed a *noyan*. ⁴⁸ Juvaini said: "There is true equality in this; each man toils as much as the next, and no difference is made between them, no attention being paid to wealth or power."

Overall command of the field army was held by a single *örlüg*, the equivalent of the modern field-marshal. Subotai was one of the first officers promoted to this rank when Chinggis Khan announced, "Let the two commanders, Jebe and Subetei [sic], lead armies as large as they can gather together." Like modern commanders, senior *noyad* rarely took active part in battle. Instead, they remained behind the front line and issued orders through a system of banners, fire signals, messengers, and whistling arrows. Impressed by the Mongol command structure, Carpini suggested to Pope Innocent IV: "The army should be organized in the same way as the Tartar [Mongol] army, under captains of a thousand, captains of a hundred, captains of ten and chiefs of the army. The last named ought on no account to take part in the battle, just as the Tartar chiefs take no part, but they should watch the army and direct it." Sa

Mongol Discipline

Discipline enabled Subotai to allow his commanders to operate independently and at great distances without fear of rebellion or insubordination.⁵⁴ Discipline ensured Mongol military units did not degenerate into mobs intent on looting, pillaging, and random violence.

Generals, princes, and individual soldiers knew their roles. The Mongol army's discipline had its roots with Chinggis Khan himself who, in a radical departure from traditional steppe warfare, prohibited his army from plundering the enemy until the battle was over: "If we overcome their soldiers no one will stop to gather their spoils. When they're beaten and the fighting is over then

there'll be time for that. We'll divide their possessions equally among us. If we're forced to retreat by their charge every man will ride back to the place where we started our attack. Any man who doesn't...will be killed."⁵⁵

While a general of Subotai's experience and reputation would certainly have commanded personal authority, his official authority to command came directly from the Khan. In fact, Chinggis Khan had once instructed Subotai: "Having established these rules – see to it that you seize and beat any man who breaks them. Any man I know who ignores my decree, have him brought back to stand before me. Any man I don't know who ignores this decree, cut off his head where he stands." ⁵⁶

Mongol discipline instilled unit cohesion and *esprit de corps*. Transfers between units were forbidden by punishment of death, and soldiers served their entire lives in a single unit.⁵⁷

Juvaini noted: "When the line goes into battle, if one or two or three or more flee, from the squad of ten, all ten are killed; and if all ten flee, unless the rest of the hundred, all of them are killed. Briefly, unless they give way together, all who flee are killed. Also, if one or two or more proceed daringly into the fight and the remainder of the ten do not follow, they are killed; and if one or more of the ten is captured and the other comrades do not free them, again they are killed."⁵⁸

Training through the "Great Hunt"

Command and control is established prior to combat through effective training and education, which make it more likely that subordinates will take the proper action.⁵⁹ While officers and princes were trained in the *keshik*, the larger army also had a formal system of training that built disciplined and cohesive units capable of complex, large-scale maneuvers on

the battlefield. Introduced by Chinggis Khan and prescribed by law, the *nerge* or *battue*, was the Mongol equivalent of the modern military field exercise. According to Juvaini:

[Chinggis Khan] paid great attention to the chase and used to say that the hunting of wild beasts was a proper occupation for the commanders of armies; and that instruction and training therein was incumbent upon warriors and men-at-arms, [who should learn] how the huntsmen come up with quarry, how they hunt it, in what manner they array themselves and after what fashion they surround it according as the party is great or small....they become accustomed and inured to hunting and familiarized with the handling of the bow and the endurance of hardships. ⁶⁰

The *nerge* was essentially a "great hunt" that took place each winter in peacetime, lasted day and night over two to three months, and covered hundreds of miles. Like a real campaign, every available soldier participated and the army was divided into three corps per Mongol doctrine. The army would first assemble into a line up to eighty miles long. The line would gradually form a large circle, which would then contract until all the animals within it were trapped in a ring of men and horses. The *nerge* required excellent communications and discipline in order to form and maintain the circle. Juvaini observed that, "Letting game escape could be punished by clubbing or death," and, "A man could be punished for not maintaining his position in the line." The hunt ended when, after a great slaughter, a gap was purposely opened in the Mongol line to allow surviving animals to escape.

The *nerge* gave soldiers and junior officers the implicit understanding of Mongol tactics that was required to achieve the cooperation and coordination characteristic of Mongol maneuver warfare. ⁶³

THE MONGOL WAR MACHINE VS. EASTERN EUROPE

Subotai began deliberate planning for the westward expansion of the Mongol empire at a quriltai in 1235. The quriltai was a mandatory assembly of the Khan, his princes and senior generals. Like modern military planning processes, the quriltai improved Subotai's command

and control ability by providing a formal means for determining aims and objectives, developing concepts of operations, allocating resources, assigning commanders, and providing for necessary coordination.⁶⁴ The Mongol planning process took into account the military capabilities and political, economic, and social conditions of the various kingdoms and duchies of Europe. Subotai's European Adversaries

For Subotai's army, discipline, training, and a clear chain-of-command made complex, coordinated maneuver warfare possible. For the Europeans, several factors combined to make sophisticated tactics and complex coordinated maneuvers uncommon: the absence of a clear chain-of-command, lack of training and discipline, and the actions of individuals primarily concerned with the outcome of personal combats and glory.

The practice of educating and training proven commanders provided the Mongols with a large pool of talented combat leaders. In contrast, the leadership of European forces was more tied to social status than merit. This system concentrated fighting power in a small number of well-equipped, but not necessarily well-led, men. The fielding of cavalry (mounted knights) required the existence of a social class of nobles who could afford to maintain a horse and armor. In exchange for their estates, these nobles were duty bound to a king to present themselves, and a certain number of armed men, for military service when called upon. Taxation allowed senior lords to afford and maintain a body of household knights – the backbone of each lord's fielded force – for permanent military service. Vassal knights – knights who owned domains, but owed allegiance to their lord – augmented household knights. A knight's training focused on individual combat skills, not on operational leadership or the command and maneuver of large formations.

Compared with the Mongols, the Europeans had a rudimentary chain-of-command under the king and lacked discipline, thus limiting the level of control that could be imposed on a force of knights and peasants. The king, or his royal officers, commanded major armies; but, each element within that army was led by the senior man present. Because authority to command was linked to social status – rather than professional experience or abilities – the noble with the highest rank or largest retinue felt entitled to direct forces. Each knight was loyal to his liege lord, who in turn owed loyalty to his superior. A liege called upon those within his own chain-of-command. The king could assign a "Constable" or "Marshal" to an army, but they were no guarantee for maintaining control. The commander of a European army often fought alongside his men in the thick of battle, exposed to danger and unable to respond to developments in the fight. Strategy for the employment of European cavalry was tied to a basic tactic: forming the whole of the cavalry into great masses, or "battles," that engaged the enemy in a head-on charge or shock. After the charge, most knights dismounted (or were brought down) and hand-to-hand combat ensued, often for hours. Each control of the commander of the commander of the commander of the commander of the cavalry into great masses, or "battles," that engaged the enemy in a head-on charge or shock. After the charge, most knights dismounted (or were brought down) and hand-to-hand combat ensued, often for hours.

The Mongol peasantry and the Mongol army were one and the same. Juvaini called it a "peasantry in the guise of an army, all of them, great and small, noble and base, in time of battle becoming swordsmen, archers and lancers and advancing in whatever manner the occasion requires." In contrast, C.W.C. Oman described medieval European infantry as "insignificant" and "...exposed – without discipline and with a miscellaneous assortment of dissimilar weapons – to a cavalry charge." In the feudal levy system, peasants owed a duty of service to their superiors and could be called out to fight as infantry units, or levies. Levies might have received some basic training if their lord thought it worthwhile; however, they generally received little

training, were badly equipped, had no experience fighting as coordinated units, and were usually disbanded once the king was no longer threatened.⁷¹

Subotai's Strategic Planning and Intelligence

Batu inherited the westernmost lands of the Mongol empire when his father Jochi died; however, these lands had yet to be conquered. The *quriltai* of 1235 decided to expand Batu's domain by moving against Russia and Hungary. Subotai was a major advocate of the decision. He saw opportunities in the west and was the resident expert on the region, because from 1221 to 1223, he and Jebe had conducted a reconnaissance in force through the Middle East, around the Caspian Sea, over the Caucasian Mountains, and into Russia (see Appendix C). Subotai argued that once the western edge of the steppes was secured, the Mongols could push into Europe, conquering nations one by one. 72

Subotai estimated that operations to bring Russia and Europe under Mongol control would take 18 years and require an army large enough to protect its own flanks, secure lines of communication, and garrison captured cities. In 1235, Batu commanded only 4,000 men. Subotai determined that it would take two years to prepare and increase troop strength, and aimed to move against Europe in 1237. By the winter of 1237, an army of 120,000 stood ready to march into Russia. In February 1241, Subotai left Russia and crossed the frozen rivers into Eastern Europe with approximately 100,000 men (30,000 were left to garrison Russia). ⁷⁴

While campaigning in Russia, Subotai had sent spies into Eastern Europe. The spies told Subotai of the rivalries between the region's various kings and nobles, and that these rulers were closely related by blood and marriage and, therefore, would likely support each other if threatened. Poland was a divided nation of nine separate principalities consolidated under the rule of four dukes. King Bela IV of Hungary could not raise the full strength of his army.

because he had lost the support of the majority of his barons through his attempts to restore the power and authority of the crown.⁷⁷ The intelligence provided to Subotai on Hungary and Poland enabled him to devise a campaign plan that maximized the opportunities presented by the political, social, and military situations of these countries.

To prevent the Hungarians and Poles from uniting and mobilizing against him, Subotai planned an offensive with mobile forces on a number of fronts at once. He first divided his army into two parts. In March 1241, Subotai sent 20,000 men under Baidur and Kadan north to strike into Poland to keep forces in the region occupied, and then sweep south to assist in the defeat of Hungary. A few days later, Subotai and Batu divided the larger army of 80,000 into contingents that entered the Carpathian Mountains by different routes on the way to Hungary: Batu took 40,000 due west, directly onto the plains of Hungary; Shiban led 10,000 through a pass on the northern flank; and, Subotai and Guyuk took 30,000 through passes on the southern-most flank. Subotai made the decision to move during the dead of winter to increase the element of surprise. Subotai understood the capabilities of his mobile force of horse-archers. He knew they could endure and overcome the extremes of weather and terrain, and move over frozen ground, rivers, and lakes on their Mongol horses. ⁷⁸

Subotai was executing, on a large scale, the Mongol concept of "marching divided, but fighting united." While this strategy would certainly have been discussed in the *keshik* and during the *nerge*, Subotai could also draw upon personal experience from his time under the command of Chinggis Khan. In 1220, Subotai served directly under Chinggis Khan when the Khan divided an army of 150,000 into three columns that defeated the Kwarazmian Empire of Shah Muhammad in a coordinated attack. As two columns converged on Samarkand, Subotai marched with the Khan and 40,000 to 50,000 men in a third column that crossed the supposedly

impassable Kizyl Kum desert to appear in the Shah's rear and capture the city of Bokhara. B.H. Liddell Hart said of the operation, "Rarely, if ever, in the history of war has the principle of surprise been so dramatically or completely fulfilled."⁸⁰

The Battle of Leignitz

Baidur and Kadan, who led the column that marched on Poland, knew their commander's overall intent – to conquer Hungary. 81 To support Subotai's ultimate objective, the two princes were assigned a task via a mission-type order: prevent Polish forces from supporting Hungary. This was a very broad objective that required the princes to operate independently with freedom of action, imagination, and initiative. The two commanders accomplished their missions through a series of battles that include one of the Mongols' most celebrated victories - the Battle of Leignitz. On April 9, 1241, Baidur and Kadan's 20,000 Mongols met an army of between 25,000 and 30,000 led by Henry the Pious, Duke of Silesia. The outnumbered Mongols almost destroyed Henry's entire army. Henry was decapitated and his impaled head paraded outside the walls of his castle at Leignitz; his wife identified his naked body by the six toes on his left foot. To show the extent of their victory, the Mongol princes delivered Subotai nine large sacks of severed right ears. After the battle, the city of Leignitz was undefended; in fact, all of Poland was available for the taking. However, Baidur and Kadan, guided by Subotai's mission-type order and fully cognizant of his overall intent, marched south to rejoin their commander in Hungary.

During the battle, Baidur and Kadan exploited the enemy's lack of discipline and inability to coordinate maneuvers, and the European knight's desire to get into the fight. At one point in the battle, a force of Mongol *mangudai* charged the Polish ranks, and then retreated in apparent confusion and disorder when repulsed. Duke Henry's cavalry could not resist and

charged after the retreating Mongols, not realizing it was a trap. The *mangudai* were, in fact, a light cavalry force that was specifically task-organized and charged with breaking the enemy's ranks and drawing them into an ambush. Once Henry's cavalry and infantry were separated, the Mongols employed a foul-smelling smokescreen to confuse and cut off the two units from each other. The European infantry, defenseless and vulnerable without the cavalry, was encircled and destroyed by the Mongols. The Polish cavalry, now extended and disordered, was engaged on the flanks by Mongol light cavalry that had been waiting in ambush. Mongol heavy cavalry then closed in on the knights to complete the slaughter.⁸²

The Battle of Mohi

The Battle of Mohi on the 10-11 of April, 1241, illustrates how techniques learned, practiced, and mastered during the *nerge* were applied to combat. During the battle, the army of King Bela IV of Hungary, having been outmaneuvered by the Mongols, withdrew into their camp on the Mohi Plain – the camp, formed from wagons chained together into a circle, was integral to the Hungarian defense. Usbotai directed two columns to encircle the enemy camp while Mongol archers and siege engines bombarded it with arrows, stones, and burning naphtha. Just like animals were allowed to escape at the conclusion of the *nerge*, Subotai's army opened a gap in the west side of its encirclement and allowed the Hungarians to escape through it. The Hungarians lost discipline – many threw down their weapons and armor – as they fled through the gap toward the city of Pesth three day's ride away. The Mongols destroyed a handful of Knights Templar that held their ground. As the Hungarians became strung out on open ground, the Mongols rode along their flanks and engaged them with arrows and lances. Over two days, about 70,000 Hungarians died. Bela crossed the Adriatic (300 miles away) to escape the ensuing pursuit.

An incident during the siege of the Hungarian camp emphasizes the fact that while Batu was in nominal command, Subotai made the final decisions. After suffering heavy casualties, Batu lost confidence and wanted to retreat. Subotai announced, "If the princes wish to retreat they may do so, but for my part I am resolved not to return until I have reached Pest and the Danube." Subotai demonstrated confidence in his army, and the courage and ability to make tough decisions in the heat of battle. Batu, chastened, did not retreat. The Mongols, of course, continued the siege and were ultimately victorious.

Communications

Subotai's columns in Hungary and Poland were at times separated by 400 to 600 miles, which made fast, reliable, and secure communications essential to command and control. The *quriltai* of 1235 expanded the system of *yams* (post stations) that connected positions throughout the Mongol interior lines. The *yams* enabled Subotai to keep in constant contact with his dispersed forces via horse couriers. Simple messages between forces in close contact were signaled by a system of flags that was replaced by burning torches at night.⁸⁷

Subotai's timing of the Battle of Mohi on April 10th – just one day after the Poles were defeated at the Battle of Leignitz – demonstrates the effectiveness of Mongol long-distance communications. John Man argues that the timing of the Battle of Mohi was not a coincidence and the two armies were in constant contact "across 450 kilometers of hostile territory, 200 of which were through the Tetra Mountains of today's Slovakia, at a time when snow still covered the slopes. This implies a regular line of messenger posts, with spare horses, linking the two separated forces, an adventure for the few dozen post-riders so astonishing that it beggars the imagination....we have to imagine that a message from Leignitz covered the intervening 450 kilometers in 36 hours."

CONCLUSIONS

In May 1242, the Mongol crossed back over the Danube and abandoned Europe, leaving a trail of destruction and slaughter in their wake. Batu rode into southern Russia and established the "Golden Horde" that controlled Russia under the "Tartar Yoke." Subotai rode back to the Mongol capital of Karakorum.

Mongol military successes over the armies of Eastern Europe were a result of superior leadership and command and control. Eight hundred years ago, the Mongols established institutions and practices that would not be unfamiliar to the modern United States military: an educated officer corps whose promotion was merit based; a professional, disciplined, and organized standing army with a clear chain-of-command; a standardized training regime; and, a formal planning process that relied on intelligence and communications.

Subotai – like his subordinate commanders – was a product of a military system that rewarded merit and developed talented individuals for major command. Subotai intimately understood the tactical employment of his military units, because he had worked his way up through the ranks of the Mongol officer corps. The *keshik* prepared Subotai to command large units and armies, because it emphasized critical thinking, planning, information management, and the understanding of strategy at all levels. Finally, Subotai had served apprenticeships under more senior commanders, such as Jebe and Chinggis Khan, which gave him the opportunity to witness the real-world application of leadership and the Mongol art of war. Subotai trusted his commanders and allowed them freedom of action, because he knew how they had been trained, educated, and developed.

The operational leadership of Subotai could only be realized when he executed command and control through a superior military organization – the Mongol army. The Mongol soldier

was hardened by his nomadic lifestyle, and was trained from youth to be an expert horseman and archer. Organizing these men into arbat, jaghut, minqat, and tümet provided a clear chain-of-command, reasonable spans of control, aided information sharing, and enabled task organization. When combined with discipline and standardized training, the Mongol military organization fostered unity-of-effort and esprit de corps. Standardized training, via the nerge, ensured that all soldiers and officers were familiar with the complex and coordinated maneuvers that were characteristic of Mongol warfare.

When developing his strategy for conquering Hungary, Subotai used a deliberate planning process that considered intelligence on the social and political situations, and military capabilities of the kingdoms and duchies of the region. The planning process, an important element of command and control, ensured the capabilities of the Mongol army were employed to the fullest and properly coordinated.

Endnotes

¹ Matthew Paris, "Chronicles: 1240-1253," in Chronicles of the Barbarians: Firsthand Accounts of Pillage and Conquest, from the Ancient World to the Fall of Constantinople. Edited by David Willis McCullough (New York: History Book Club, 1998), 290-298. The Mongols were often called Tartars in Europe. The Mongols may have been confused with the Tartars, a nomadic tribe that Chinggis Khan conquered and made part of the Mongol Nation. The Mongols may have been feared as inhabitants of Tartarus, the hell in Greek Mythology.

² U.S. Marine Corps, *Marine Corps Doctrinal Publication 6 - Command and Control* (Washington, D.C.: Headquarters U.S. Marine Corps, 1996), 122.

³ Timothy May, The Mongol Art of War: Chinggis Khan and the Mongol Military System (Yardley, PA: Westholme Publishing, LLC, 2007), 86.

⁴ B.H. Liddell Hart, *Great Captains Unveiled*, 1996 edition with new introduction by Russell F. Wright, originally published in 1927 (Da Capo Press, 1996), 30. See also Richard A. Gabriel, *Genghis Khan's Greatest General: Subotai the Valiant* (Norman, OK: University of Oklahoma Press, 2004), 136.

⁵ Friar Giovanni DiPlano Carpini, *The Story of the Mongols Whom We Call the Tartars*, translated by Erik Hildinger (Boston, MA: Branden Publishing Company, Inc.), 1996.

⁶ His name appears in sources as Subedei, Subotai, Subotai.

⁷ Paul Kahn, *The Secret History of the Mongols: The Origin of Chingis Khan*, expanded Edition, an adaptation of the Yüan Ch'ao Pi Shih, based primarily on the English translation by Francis Woodman Cleaves (Boston, MA: Cheng & Tsui Co., 1998), 10.

⁸ Khan, 101-102. Indeed, both brothers were among the Khan's dörben noqais, or "Four Hounds." Tayang Khan of the Naiman asked Jamugha: "What are these people who charge at us like wolves pursuing so many sheep, chasing the sheep right into the flock?" And Jamugha replied, "My friend, Anda Temujin, has fed four dogs with human flesh, then held them back with iron chains. These are the people who charge at us, pursuing our soldiers. These four dogs have helmets of copper, snouts like chisels, tongues like awls, hearts of iron, whips sharp as swords. These four dogs feed on the dew and ride on the winds. These four, when they fight an enemy, feed on his flesh. These four take human flesh as their share of the spoils. Now he's cast off their chains and set them on us. He's let them loose and they charge at us, mad with joy, their hungry mouths foaming....These four are Jebe and Khubilai, Jelme and Subetai."

⁹ U.S. Marine Corps, 114.

Garbriel, 26; 31. In the early days of the national army, officers were elected as a concession to tribal loyalty; but, as the army became larger and more complex, election to command was retained only at the *arban* or lowest level, i.e., the ten men of an *arban* would select their own commander. Chinese, Muslims, and even an Englishman held important positions (Gabriel, 31). See also May, *The Mongol Art of War*; 88; Paul Ratchnevsky, *Genghis Khan: His Life and Legacy*, translated and edited by Thomas Nivison Haining (Oxford, UK: Blackwell Publishers, 1992), 172. ¹¹ Ratchnevsky, 171.

¹² Ratchnevsky, 93; see also May, The Mongol Art of War, 89.

¹³ Racthnevsky, 172.

¹⁴ Ratchnevsky, 172.

¹⁵ Khan, 96-97. See also Paul D. Buell, "Süb□tei Ba'atur" in *In the Service of the Khan: Eminent Personalities of the Early Mongol-Yüan Period (1200-1300)*, edited by Igor de Rachewiltz, Hok-lam Chan, Hsiao Ch'ich'ing and Peter Geier with the assistance of May Wang (Wiesbaden: Otto Harrassowitz, 1993), 14.

¹⁶ James Chambers, The Devil's Horsemen: The Mongol Invasion of Europe (Edison, NJ: Castle Books, 1979), 59. "Above all the Kashik served as the Mongol Staff College." See also Gabriel, 37; May, The Mongol Art, 32-33: "In addition to guarding the Khan, the keshik carried out a variety of tasks, including those of qorci or archer; siba 'uci or falconer; jarligchi, who wrote sacred decrees; biceci, who recorded annals for the emperor; ba'urci, who cooked and served drinks; üldüci or köldölci, who assisted the emperor with his sword and bow; balaghci, in charge of the palace gates or approaches; daraci, in charge of the wine; ula'aci or morinci, in charge of the wagons and horses; sügürci, in charge of garments for imperial use; temici or camel tender; qoninci or shepherd; qulaghanci, who captured thieves and seem to have acted as police; qurci, who played music; and ba'adur, the braves and warriors who all members of the keshik ahould strive to emulate."

Ala-ad-Din 'Ata-Malik Juvaini, The History of the World-Conqueror, translated from the text of Mirza Muhammad Qazvini by John Andrew Boyle (Cambridge, MA: Harvard University Press, 1958), 482.
 Khan, 128.

20 May, The Mongol Art, 87.

MA: Da Capo Press, 1997), 119. Subotai would loyally serve three Khans: Chinggis. Ogodei, and Guyuk.

²³ Chambers, 59; See also May, The Mongol Art, 87.

²⁴ Khan, 130.

²⁶ Gabriel, 7-9.

²⁹ Gabriel, 23.

³¹U.S. Marine Corps, 79.

³² Khan, 109.

34 Gabriel, 30.

³⁶ Chambers, 54.

³⁸ Carpini, 54.

³⁹ Gabriel, 26.

⁴¹ Hildinger, Warriors, 13.

⁴³ U.S. Marine Corps, 88-91; 133.

¹⁹ Gabriel, 37-38. See also May, The Mongol Art, 87; Chambers, 59.

²¹ Richard D. McCreight, "The Mongol Warrior Epic: Masters of Thirteenth Century Maneuver Warfare," (Masters Thesis, U.S. Army Command and General Staff College, 1971), 16-17, 23-24. See also: Ralph Fox, Genghis Khan (New York, Harcourt, Brace and Company, 1936), 215-216; Saunders, 61, 37.

²² Erik Hildinger, Warriors of the Steppe: A Military History of Central Asia, 500 B.C. to 1700 A.D. (Cambridge,

²⁵Chambers, 59. Every bahadur wore black armor, a black kalat with red facings, and rode a black horse with red leather harness and saddle.

²⁷ Buell, 13-25. Subotai was actively involved in fighting as Chenghis Khan subdued his enemies. 1209, under Jebe, he pursued Oudu and his brothers. In 1209, under Jebe, he secured the trade route to the Kwarazmian Empire and beyond through north Turkestan. In 1211, he served under Jebe against the Chin. In 1217-1218, he probably served under Jebe in a campaign in Turkestan. In 1219-1220, he served under Chenghis Khan against the Shah Muhammad. In 1220, he pursued, with Jebe, the Shah to an island in the Caspian Sea. He was given joint command of the 3,000 Mongols sent in pursuit of the Shah. In 1221, at Subotai's suggestion, Jebe and Subotai conducted a reconnaissance in force. In 1223-1224, Jebe died leaving Subotai the resident expert on the west. See Turnbal, 74-751: His first independent command was in 1205-1206 when he successfully pursued and killed Kutu and Chila'un, sons of the defeated Merki leader, Tokhto'a. Following the death of Jebe on the return journey, Subodai successfully led the Mongol army home having covered around 6,500 kilometers (4,000 miles) in less than three years. ²⁸ May, *The Mongol Art*, 87-88; 93.

³⁰ Robert Marshall, Storm from the East: From Genghis Khan to Khubilai Khan, (Berkeley and Los Angeles, CA: University of California Press, 1993), 91. The princes were: Batu's brothers Orda, Shiban, Berke, and Sinkur; Chagadei's (Chinggis Khan's brother) sons Baidur and Buri; Ogodei Khan's sons Guyuk and Kadan; and Tolui's (Chinggis Khan's youngest brother) sons Mongke and Budjek. See also Buell, 22. According to Buell, Subotai's own son Uriyangqadai was also present.

³³ Marco Polo, The Book of Marco Polo the Venetian Concerning the Kingdoms and Marvels of the East. Volume I. third edition with preface by Henri Cordier., translated and edited by Sir Henry Yule (London: John Murray, 1903), 262-263, "They are excellent soldiers, and passing valiant in battle. They are also more capable of hardships than other nations; for many a time, if need be, they will go for a month without any supply of food, living only on the milk of the mares and on such game as their bows may win them."

³⁵ Chambers, 53; Hildinger, Warriors, 6.

³⁷ May, The Mongol Art, 42; Chambers, 59.

⁴⁰ Marco Polo, 262-263. "And in case of great urgency they will ride ten days on end without lighting a fire or taking a meal. On such occasion they will sustain themselves on the blood of their horses, opening a vein and letting the blood jet into their mouths, drinking until they have had enough, and then staunching it."

⁴² U.S. Marine Corps, 48.

⁴⁴ Turnbull, Mongol Warrior, 13-15; May, The Mongol Art, 50-52; Gabriel, 32-33. Different arrow heads accomplished different functions, for example, armor piercing, signal heads that whistled, poisoned tipped, and knobbed stun. Each Mongol soldier was generally equipped in a standard fashion: a heavy sheepskin coat over a silk shirt; a leather belt secured the coat and held a sword; a brimmed felt and leather hat on the march and a leather or iron casque helmet in battle; two to three composite bows (but, at least one good one); three quivers of about sixty arrows with various heads; a light axe, lasso, sewing needle, fishing line, file, coil of rope, cooking pot, leather

bottles, and a large leather bag with a thong to keep clothes dry when crossing rivers. On campaign, two men shared one ger, or tent. The army included light cavalry (horse archers) and heavy cavalrymen. Heavy cavalrymen differed from light cavalrymen in that they wore a heavier coat of lamellar armor and carried a twelve foot lance with a hooked end.

45 Gabriel, 27; May, The Mongol Art, 31.

⁴⁶ Gabriel, 27.

47 May, The Mongol Art, 32.

48 May, The Mongol Art, 88. These were called arban-u novan (commander of ten), jaghun-u novan (commander of 100), mingan-u novan (commander of 1,000), and tümen-ü novan (commander of 10,000).

⁴⁹ Juvaini, 31.

50 May, The Mongol Art, 88; Gabriel, 26.

- 51 Khan, 128. The Khan assigned the *örlüg* to an army, but the *örlüg* would select the *tümen-ü noyan* who in turn selected the mingan-u noyan, and so forth, with each commander selecting his own iunior officers, right down to the arban-u novan.
- ⁵² Carpini, 75. "The generals or princes of the army do not go into the battle, but stay a long way from the enemy and they have boys and women on horses next to them, and sometimes they put dummies on them."

⁵³ Camini, 74.

54 May, The Mongol Art, 47.

55 Khan, 65. While still a vassal of Toghril Ong-Qan, he introduced a radical departure from traditional steppe warfare when, attacking the Tartars at Dalan Nemürges in 1202,

⁵⁶Khan, 108. When Chinggis sent Subotai to pursue the sons of Toghtoga Beki and their followers.

⁵⁷ Gabriel, 28. See also Juvaini, 32: Juvaini noted that "no man may depart to another unit than the hundred, thousand or ten to which he has been assigned, nor may he seek refuge elsewhere. And if this order be transgressed the man who transferred is executed in the presence of the troops, while he that received him is severely punished. For this reason no man can give refuge to another... Therefore no man can take liberties with his commander or leader, nor can another commander entice him away."

⁵⁸ Carpini, 72.

⁵⁹ U.S. Marine Corps, 37.

⁶⁰ Juvaini, 27-28.

61 May, The Mongol Art, 46; Chambers, 60-61.

⁶² Juvaini, 27-28.

⁶³ U.S. Marine Corps, 115.

⁶⁴ May, The Mongol Art, 91-92. As most of the major figures were present, generals and princes were immediately assigned to the command of units. See also U.S. Marine Corps, 37 for an explanation of planning processes.

65 Martin J. Dougherty, Weapons & Fighting Techniques of the Medieval Warrior: 1000-1500 A.D. (New York: Metro Books, 2008), 22-24.

66 Oman, 58.

⁶⁷ Erik Hildinger, "Mongol Invasion of Europe." Military History 14, no. 2 (June 1997): 40.

68 Oman, 60; Chambers, 51; Marshall, 92.

⁷⁰ C.W.C. Oman, The Art of War in the Middle Ages: A.D. 378-1515, revised and edited by John H. Beeler (London: Cornell University Press, 1953), 64. 71 Chambers, 51; Marshall, 93.

⁷² Marshall, 88-89.

⁷³ Marshall, 88-89; Chambers, 49.

⁷⁴ Marshall, 90-91.

⁷⁵ Hildinger, Mongol Invasion, 43.

- ⁷⁶ Saunders, 84-85; Marshall, 108-110; Chambers, 90-92. Poland was a divided nation of nine separate principalities consolidated under the rule of four dukes: Conrad of Mazonia; Miecislaw of Oppeln; Henry the Pious of Silesia; and, Boleslaw the Chaste of Sandomir, who also controlled Cracow and claimed the tile of King of Poland. Two of the dukes were related to King Bela IV of Hungary: Henry was his cousin, and Boleslaw was married to his daughter. Although warned by both the Russians and Bela, the Polish dukes seemed unconcerned by the Mongol threat.
- ⁷⁷ Hilbinger, Mongol Invasion, 40. The Golden Bull of 1222 authorized rebellion against the King in certain circumstances and made the Bela only "primus inter pares" - first among equals. Bela's position was further

weakened with the barons when he placed 200,000 Cumans, a nomadic steppe people the Mongols had driven out of Russia, under his protection. The barons mistrusted the Cumans and were jealous and threatened by the military power they brought to Bela – 40,000 warriors familiar with Mongol warfare. In December 1240, Batu wrote, "Word has come to me that you have taken the Cumans, our servants, under your protection. Cease harboring them, or you will make of me an enemy because of them. They, who have no houses and dwell in tents, will find it easy to escape. But you who dwell in houses within towns – how can you escape me?" Bela rejected the ultimatum, and the Mongols used his protection of the Cumans as a pretext for war.

⁷⁸ Buell 24.

⁸⁰ Liddell Hart, 15.

⁸² Gabriel, 112-114; Marshall, 113-115; J.J. Saunders, *The History of the Mongol Conquests* (Philadelphia, PA: University of Pennsylvania Press, 1971), 85.

⁸³ Timothy May, "The Training of an Inner Asian Nomad Army in the Pre-Modern Period," *The Journal of Military History* 70, no. 3 (July 2006): 617-635.

84 May, The Mongol Art, 107-109.

⁸⁶ Chambers, 103.

88 Man, 272.

⁷⁹ Timothy May, "Gengis Kan Secrets of Success," *Military History* 24, no. 5 (Jul/Aug 2007), 48.

⁸¹ Some references list Kadan as leading the Mongol armies at the Battle of Leignitz. Kaidu and Kadan were often confused by medieval chroniclers.

⁸⁵ Gabriel, 123-124; Hildinger, 145-146.

⁸⁷ Chambers, 61.

Glossary

arban: A ten man troop of one officer and nine men. Plural, arbat.

Bahadur: A Mongol knight or warrior of the keshik. Subotai was known as "Subotai Bahadur" throughout his life. Also appears as bagatur, ba'adur and baatar.

baraghun ghar: The right flank of a Mongol field army.

battue: Also known as the *nerge*, was the Mongol equivalent of the modern military field exercise. It was essentially a "great hunt" that took place each winter in peacetime, lasted day and night over two to three months, and covered hundreds of miles.

dörben noquis: Literal translation is "Four Hounds," who were four Mongol generals known for ferociousness in battle and pursuit of the leaders of defeated armies. The four generals were Jebe, Khubilai, Jelme and Subotai. From The Secret History of the Mongols: Tayang Khan of the Naiman asked Jamugha: "What are these people who charge at us like wolves pursuing so many sheep, chasing the sheep right into the flock?" And Jamugha replied, "My friend, Anda Temujin, has fed four dogs with human flesh, then held them back with iron chains. These are the people who charge at us, pursuing our soldiers. These four dogs have helmets of copper, snouts like chisels, tongues like awls, hearts of iron, whips sharp as swords. These four dogs feed on the dew and ride on the winds. These four, when they fight an enemy, feed on his flesh. These four take human flesh as their share of the spoils. Now he's cast off their chains and set them on us. He's let them loose and they charge at us, mad with joy, their hungry mouths foaming....These four are Jebe and Khubilai, Jelme and Subetai."

jaghun: A 100 man squadron, comprised of ten arbat. Plural, jaghut.

je'ün ghar: The left flank of a Mongol filed army.

kebte'ül: The "night guards" of the Khan's personal bodyguard (or keshik).

keshik: The Khan's personal bodyguard of 10,000 men. Also served as a training institution for future commanders and administrators.

mangudai: a Mongol light cavalry force specifically tasked with breaking the enemy's ranks and drawing them into an ambush.

minqan: A regiment of 1,000 men, comprised of ten jaghut. Plural, minqat.

nerge: Also known as the *battue*, was the Mongol equivalent of the modern military field exercise. It was essentially a "great hunt" that took place each winter in peacetime, lasted day and night over two to three months, and covered hundreds of miles.

noyan: A Mongol officer or commander. Plural, noyad.

ordu: A Mongol camp. The word "horde" originated from the Mongol ordu.

örlüg: The overall commander of a Mongol field army; the equivalent of the modern field-marshal.

ortaq: The Mongol word for merchants.

quriltai: A mandatory assembly of the Khan and his princes and senior generals. It functioned as a planning cell.

tümen: A 10,000 man division comprised of ten minqat. It was capable of sustained, long-range operations on a strategic scale. Plural, tümet.

töb: Also known as qol. The center or pivot section of a Mongol field army.

turqa'ut: the "day guards" of the Khan's personal bodyguard.

Uriyangkhai: One of the clans known as the Forest Mongols, who lived in the forest taiga of Lake Baikal and Siberia north of Mongolia. Subotai was born into this clan.

yams: Mongol post stations setup to aid in communications between areas.

qol: Also known as töb. The center or pivot section of a Mongol field army.

List of Key Individuals

King Bela IV of Hungary (1200 – 1235): King of Hungary from 1235 to 1270. His armies were defeated by Subotai at the Battle of Mohi on April 10, 1241. Bela escaped and returned to rebuild his country.

Chinggis Khan (1165 - 1226/7): Born Temujin, he founded united the clans of the Mongolian steppe and found the Mongol Empire which was the largest contiguous empire in history.

Friar Giovanni DiPlano Carpini (1180 – 1252): A Franciscan monk who traveled to the Mongol capital city of Karakorum between 1245 and 1227 at the direction of Pope Innocent IV. He documented his travels in *The Story of the Mongols Whom We Call the Tartars*.

Guyuk Khan (1206 - 1248): Ogodei Khan's son, and third Khan of the Mongol Empire from 1246 to 1248.

Henry the Pious (1196 – 1241): The Duke of Silesia, who died while leading a Polish army against the Mongol princes Baidur and Kadan at the Battle of Leignitz on April 9, 1241.

Jelme: Subotai's older brother who was given to Chinggis Khan (at the time known as Temujin) as a slave. Jelme became a lifelong companion of the Khan, and one of his most capable generals.

Juvaini (1226 – 1283): 'Ala-ad-Din 'Ata-Malik Juvaini, was a Persian historian who wrote about the Mongols in his *The History of the World-Conqueror*.

Marco Polo (1254 - 1324): The famous Venetian merchant who traveled the "silk road." He wrote about the Mongols after visiting the court of Kublai Khan.

Matthew Paris (1200 - 1259): A medieval Benedictine monk who wrote about the Mongol invasions in his *Chronicles*.

Ogodei Khan (1186 – 1241): Chinggis Khan's third son, who succeeded him to become the second Great Khan of the Mongol Empire.

Rashid al-Din (1247 - 1318): A Persian historian who wrote about the Mongols.

Shah Muhammad: Ruler of the Kwarazmian Empire

The Mongol princes who took part in the Hungarian Campaign: Batu and his brothers Orda, Shiban, Berke, and Sinkur; Chagadei's (Chinggis Khan's brother) sons Baidur and Buri; Ogodei Khan's sons Guyuk and Kadan; and Tolui's (Chinggis Khan's youngest brother) sons Mongke and Budjek.

Appendix A

TIMELINE

1175/6	Subotai is born to Jarchigudai, a blacksmith of the Uriyangkhai.
1187	Jelme is given to Temujin as a slave. Jelme is about eighteen years old.
1190	Subotai joins Temujin's band. Subotai is about fourteen or fifteen years old.
1203	Chinggis Khan establishes the <i>keshik</i> as a bodyguard force of eighty <i>kebte'ül</i> (night guards) and seventy <i>turqa'ut</i> (day guards), with an additional <i>minqan</i> that escorted Chenghis Khan into battle. Subotai is enrolled into the <i>keshik</i> .
1204-1205	Temujin's campaign to unite the tribes of the Mongolian steppe. Subotai commanded a hundred "archers" (Buell, 14).
1206	Temujin named "Chinggis Khan," which probably mean "universal ruler." Keshik is expanded to 10,000 men. Subotai made a "chiliarch."
1209	Subotai serves under Jebe during the pursuit of Kutu and Chila'un, sons of the defeated Merki leader, Tokhto'a.
1209	Subotai serves under Jebe, in a campaign to secure the trade route to the Kwarazmian Empire and beyond through north Turkestan.
1211-1215	Subotai serves under Jebe in a campaign against the Chin (Jin) Empire.
1217-1218	Subotai likely served under Jebe in a campaign in Turkestan.
1219-1220	Subotai serves under Chinggis Khan against Shah Muhammad to conquer the Kwarazmian Empire.
1220	Subotai and Jebe, jointly commanding 3,000 Mongols, pursue the Shah to an island in the Caspian Sea. He was given joint command of the 3,000 Mongols sent in pursuit of the Shah.
1221-1223	At Subotai's suggestion, Jebe and Subotai conduct a reconnaissance in force through the Middle East, around the Caspian Sea, over the Caucasian Mountains, and into Russia. Jebe dies in 1223 on the return to Mongolia. Following the death of Jebe, Subotai successfully lead the Mongol army home having covered around 6,500 kilometers (4,000 miles) in less than three years.
1227	Chinggis Khan dies.
1227-1232	Subotai leads campaign against the Chin.
1234	Subotai leads Mongol defeat of Chin.

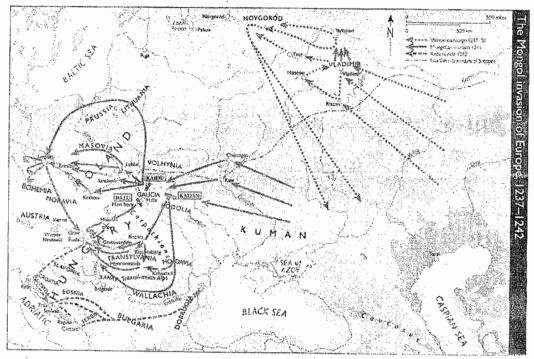
1235	Decision to expand Batu's territory made at quriltai.	
1248	Subotai dies in Mongolia at the age of seventy-three.	(*)************************************
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Appendix B

Figure B.1. Routes of advance for Subotai's columns during the invasions of Russia and Hungary.

Source: Turnbull, Stephen. Genghis Khan & the Mongol Conquests, 1190-1400. Oxford, UK:



Osprey Publishing, Ltd., 2003, 46.

Appendix C

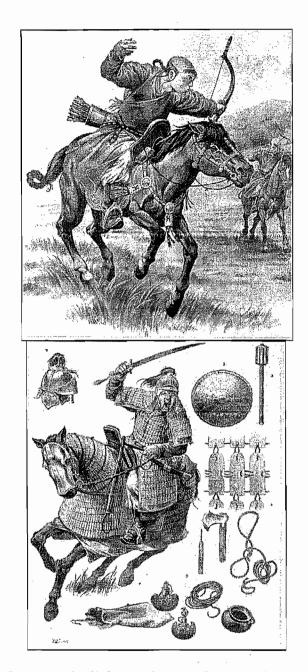


Figure C.1. Depictions of a Mongol a light cavalryman (horse-archer) and a heavy cavalryman.

Source: Turnbull, Stephen. Mongol Warrior, 1200-1350. Oxford, UK: Osprey Publishing, Ltd., 2003, 34; 40.

Appendix D

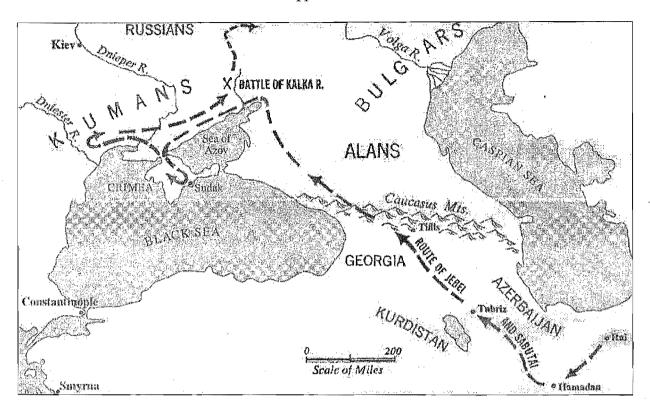


Figure D.1. Route of Subotai's reconnaissance in force.

Source: Gabriel, Richard A. Genghis Khan's Greatest General: Subotai the Valiant. Norman, OK: University of Oklahoma Press, 2004, 103.

Bibliography

- Bartlett, W.B. *The Mongols: From Genghis Khan to Tamerlane*. Gloucestershire, UK: Amberly Publishing, 2009.
- Buell, Paul D. "Süb ☐ tei Ba'atur" in In the Service of the Khan: Eminent Personalities of the Early Mongol-Yüan Period (1200-1300). Edited by Igor de Rachewiltz, Hok-lam Chan, Hsiao Ch'ich'ing and Peter Geier with the assistance of May Wang. Wiesbaden: Otto Harrassowitz, 1993.
- Biran, Michal. "The Mongol Transformation: From the Steppe to Eurasian Empire." *Medieval Encounters* 10, no. 1-3 (2004). http://www.proquest.com/.
- Carpini, Friar Giovanni DiPlano. *The Story of the Mongols Whom We Call the Tartars*.

 Translated by Erik Hildinger. Boston, MA: Branden Publishing Company, Inc., 1996.
- Chambers, James. *The Devil's Horsemen: The Mongol Invasion of Europe*. Edison, NJ: Castle Books, 1979.
- Cheshire, Harold T. "The Great Tartar Invasion of Europe." *The Slavonic Review* 5, no. 13 (June 1926): 89-105. http://www.proquest.com/.
- Conant, Hollyn. "Genghis Khan's Communication Network." *Military Review* 74, no. 8 (August 1994): 65-68. http://www.proquest.com/.
- Dougherty, Martin J. Weapons and Fighting Techniques of the Medieval Warrior: 1000-1500 AD. New York: Metro Books, 2008.
- Craughwell, Thomas. How the Barbarian Invasions Shaped the Modern World: The Vikings, Vandals, Huns, Mongols, Goths, and Tartars who Razed the Old World and Formed the New. Beverly, MA: Fair Winds Press, 2008.
- Fox, Ralph. Genghis Khan. New York: Harcourt, Brace, and Company, 1936.
- Gabriel, Richard A. Genghis Khan's Greatest General: Subotai the Valiant. Norman, OK: University of Oklahoma Press, 2004.
- Hildinger, Erik. "Mongol Invasion of Europe." Military History 14, no. 2 (June 1997): 38-40.
- Hildinger, Erik. Warriors of the Steppe: A Military History of Central Asia, 500 B.C. to 1700 A.D. Cambridge, MA: Da Capo Press, 1997.
- Ibn al-Athir (c. 1160-1233). "The Coming of the Mongols." In *The Art of War in World History:* From Antiquity to the Nuclear Age, edited by, Gérard Chaliand, 463-464. Berkeley and Los Angeles, CA: University of California Press, 1994.

- Juvaini, 'Ala-ad-Din 'Ata-Malik. *The History of the World-Conqueror*. Translated from the text of Mirza Muhammad Qazvini by John Andrew Boyle. Cambridge, MA: Harvard University Press, 1958.
- Kahn, Paul. The Secret History of the Mongols: The Origin of Chingis Khan. Expanded Edition. An adaptation of the Yuan Ch'ao Pi Shih, based primarily on the English translation by Francis Woodman Cleaves. Boston, MA: Cheng & Tsui Co., 1998.
- Kennedy, Hugh. Mongols, Huns & Vikings. London, UK: Cassell & Co., 2002.
- Liddell Hart, B.H. *Great Captains Unveiled*. Originally published in 1927. New introduction by 1996 by Russell F. Weigley, U.S.: Da Capo Press, 1996.
- Man, John. Genghis Khan: Life, Death, and Resurrection. New York: Thomas Dunne Books, 2004.
- Marco Polo. The Book of Marco Polo the Venetian Concerning the Kingdoms and Marvels of the East, Volume I. Third edition with preface by Henri Cordier. Translated and edited by Sir Henry Yule. London: John Murray, 1903.
- Marshall, Robert. Storm from the East: From Genghis Khan to Khubilai Khan. Berkeley and Los Angeles, CA: University of California Press, 1993.
- May, Timothy. "Gengis Kan Secrets of Success." Military History 24, no. 5 (Jul/Aug 2007): 42-49.
- May, Timothy. The Mongol Art of War: Chinggis Khan and the Mongol Military System. Yardley, PA: Westholme Publishing, LLC, 2007.
- May, Timothy. "The Training of an Inner Asian Nomad Army in the Pre-Modern Period." *The Journal of Military History* 70, no. 3 (July 2006): 617-635.
- McCullough, David Willis. Chronicles of the Barabarians: Firsthand Accounts of Pillage and Conquest, from the Ancient World to the Fall of Constantinople. New York: History Book Club, 1998.
- McCreight, Richard D. "The Mongol Warrior Epic: Masters of Thirteenth Century Maneuver Warfare." Masters Thesis, U.S. Army Command and General Staff College, 1971.
- Morris, Rossabi. "All the Khan's Horses." Natural History 103, no. 10 (October 1994): 48-57.
- Oman, C.W.C. *The Art of War in the Middle Ages: A.D. 378-1515.* First edition 1885. Revised and edited by John H. Beeler. London: Cornell Paperbacks, Cornell University Press, 1953.
- Phillips, E.D. The Mongols. New York: Frederick A. Praeger, Inc., 1969.

- Ramirez, Joe E. "Genghis Khan and Maneuver Warfare." Masters thesis, U.S. Army War College, 2000.
- Ratchnevsky, Paul. *Genghis Khan: His Life and Legacy*. Translated and edited by Thomas Nivison Haining. Oxford, UK: Blackwell Publishers, 1992.
- Rogers, Greg S. "An Examination of Historian's Explanations for the Mongol Withdrawal from East Europe." East European Quarterly 30, no. 1 (Spring 1996): 3-26
- Santosuosso, Antonio. Barbarians, Marauders, and Infidels: The Ways of Medieval Warfare. Boulder, CO: Westview Press, 2004.
- Saunders, J.J. *The History of the Mongol Conquests*. Philadelphia, PA: University of Pennsylvania Press, 1971.
- Sinor, Denis. "The Inner Asian Warriors." Journal of the American Oriental Society 101, no. 2 (April June 1981): 133-144.
- Smith, John Masson, Jr. "Mongol Manpower and Persian Population." *Journal of the Economic and Social History of the Orient* 18, no. 3 (October 1975): 271-299.
- Turnbull, Stephen. Genghis Khan & the Mongol Conquests, 1190-1400. Oxford, UK: Osprey Publishing, Ltd., 2003.
- Turnbull, Stephen. Mongol Warrior, 1200-1350. Oxford, UK: Osprey Publishing, Ltd., 2003.
- Weatherford, Jack. Genghis Khan and the Making of the Modern World. New York: Three Rivers Press, 2004.
- William of Rubruck. William of Rubruck's Account of the Mongols: The Journey of William of Rubruck, to the eastern parts of the world, 1235-55, as narrated by himself, with two accounts of the earlier journey of John of Pian de Carpine. Translated from the Latin by William Woodville Rockhill. 1900. Reprinted with introduction by Daniel C. Waugh. Maryland, USA: Rana Saad, 2005.